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Glu Asn Tyr Tyr Val Ile Tyr Ser Ser Met Leu Tyr Arg Gln Gln  
155 160 165  
Glu Ser Gly Arg Ala Trp Phe Leu Gly Leu Asn Lys Glu Gly Gln  
170 175 180  
Ala Met Lys Gly Asn Arg Val Lys Lys Thr Lys Pro Ala Ala His  
185 190 195  
Phe Leu Pro Lys Pro Leu Glu Val Ala Met Tyr Arg Glu Pro Ser  
200 205 210  
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caattggttt aatgctgaat tactgaagag ggctaagcaa aaccaggtgc 250  
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 ccgcgagctt tcttctcgcc ttgcctctc ctctcgcgc gtcttgga 450  
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[illegible]

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Glu Phe Tyr Met	Arg Gln Thr Gly Pro	Ile Ser Ala Thr Leu	Val		
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Met Thr Arg Pro	Ile Lys Gly Pro Arg	Glu Ile Gln Leu Asp	Leu		
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Glu Met Ile Thr	Val Asn Thr Val Ile	Asn Phe Arg Gly Ser	Ser		
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Phe	Gln	Ile	Ala	Asp	Cys	Ala	Tyr	Arg	Asp	Leu	Glu	Ser	Val	Pro	
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Leu	Gln	Ser	Leu	Trp	Leu	Ala	His	Asn	Glu	Ile	Arg	Thr	Val	Ala	
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Leu	Ser	Ala	Leu	Gln	Leu	Leu	Lys	Met	Asp	Ser	Asn	Glu	Leu	Thr	
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Phe	Thr	Pro	Leu	Thr	Ala	Leu	Ser	His	Leu	Gln	Ile	Asn	Glu	Asn	
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Pro	Phe	Asp	Cys	Thr	Cys	Gly	Ile	Val	Trp	Leu	Lys	Thr	Trp	Ala	
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Gln	Pro	Arg	Phe	Gln 305	Ala	Phe	Ala	Asn	Gly 310	Ser	Leu	Leu	Ile	Pro 315
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<212> PRT

<213> Homo Sapien

<400> 22

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				20					25				30	

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<212> PRT
<213> Homo Sapien
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<400> 24





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 50 55 60  
 Gln Asp Glu Val Pro Gln Gln Thr Val Ala Pro Gln Gln Gln Arg  
 65 70 75  
 Arg Ser Leu Lys Glu Glu Glu Cys Pro Ala Gly Ser His Arg Ser  
 80 85 90  
 Glu Tyr Thr Gly Ala Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr  
 95 100 105  
 Thr Ile Ala Ser Asn Asn Leu Pro Ser Cys Leu Leu Cys Thr Val  
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Asp	Thr	Val	Cys	Gln	Cys	Glu	Lys	Gly	Ser	Phe	Gln	Asp	Lys	Asn
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Ser	Pro	Glu	Met	Cys	Arg	Thr	Cys	Arg	Thr	Gly	Cys	Pro	Arg	Gly
				155					160					165
Met	Val	Lys	Val	Ser	Asn	Cys	Thr	Pro	Arg	Ser	Asp	Ile	Lys	Cys
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Lys	Asn	Glu	Ser	Ala	Ala	Ser	Ser	Thr	Gly	Lys	Thr	Pro	Ala	Ala
				185					190					195
Glu	Glu	Thr	Val	Thr	Thr	Ile	Leu	Gly	Met	Leu	Ala	Ser	Pro	Tyr
				200					205					210
His	Tyr	Leu	Ile	Ile	Ile	Val	Val	Leu	Val	Ile	Ile	Leu	Ala	Val
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Val	Val	Val	Gly	Phe	Ser	Cys	Arg	Lys	Lys	Phe	Ile	Ser	Tyr	Leu
				230					235					240
Lys	Gly	Ile	Cys	Ser	Gly	Gly	Gly	Gly	Gly	Pro	Glu	Arg	Val	His
				245					250					255
Arg	Val	Leu	Phe	Arg	Arg	Arg	Ser	Cys	Pro	Ser	Arg	Val	Pro	Gly
				260					265					270
Ala	Glu	Asp	Asn	Ala	Arg	Asn	Glu	Thr	Leu	Ser	Asn	Arg	Tyr	Leu
				275					280					285
Gln	Pro	Thr	Gln	Val	Ser	Glu	Gln	Glu	Ile	Gln	Gly	Gln	Glu	Leu
				290					295					300
Ala	Glu	Leu	Thr	Gly	Val	Thr	Val	Glu	Ser	Pro	Glu	Glu	Pro	Gln
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				320					325					330
Leu	Leu	Val	Pro	Val	Asn	Asp	Ala	Asp	Ser	Ala	Asp	Ile	Ser	Thr
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Leu	Leu	Asp	Ala	Ser	Ala	Thr	Leu	Glu	Glu	Gly	His	Ala	Lys	Glu
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Thr	Ile	Gln	Asp	Gln	Leu	Val	Gly	Ser	Glu	Lys	Leu	Phe	Tyr	Glu
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<223> Synthetic oligonucleotide probe

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<210> 31

<211> 963

<212> DNA

<213> Homo Sapien

<400> 31

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gcatcgggga gaggcctgtc ctcaaagctc cagtcccca aaggcaaaaa 200

tgtgaccact ggactccctg cccatctgac acctatgcct acaggttact 250

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caggaacatg aaattcaggt ctagctgggt atttattgca gcaaaaggct 600

tggaactccc ttccgaaatt cagagagaaa agatcaacca ctctgatgct 650

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catttgctag ttgtatcaaa tcttggtacg cagtattttt ataccagtat 900

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<211> 235

<212> PRT

<213> Homo Sapien

<400> 32

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<220>  
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<400> 35  
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<210> 36  
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<400> 36  
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<210> 37  
 <211> 47  
 <212> DNA  
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Tyr	Phe	Gly	Ile	Val 110	Ser	Val	Arg	Ile	Leu 115	Val	His	Glu	Trp	Pro 120
Met	Thr	Ser	Gly	Ser 125	Ser	Leu	Gln	Leu	Ile 130	Val	Ile	Gln	Glu	Glu 135
Val	Val	Glu	Ile	Asp 140	Gly	Lys	Gln	Val	Gln 145	Gln	Lys	Asp	Val	Thr 150
Glu	Ile	Asp	Ile	Leu 155	Val	Lys	Asn	Arg	Gly 160	Val	Leu	Arg	His	Ser 165
Asn	Tyr	Thr	Leu	Pro 170	Leu	Glu	Glu	Ser	Met 175	Leu	Tyr	Ser	Ile	Ser 180
Arg	Asp	Ser	Asp	Ile 185	Leu	Phe	Thr	Leu	Pro 190	Asn	Leu	Ser	Lys	Lys 195
Glu	Ser	Val	Ser	Ser 200	Leu	Gln	Thr	Thr	Ser 205	Gln	Tyr	Leu	Ile	Arg 210
Asn	Val	Glu	Thr	Thr 215	Val	Asp	Glu	Asp	Val 220	Leu	Pro	Gly	Lys	Leu 225
Pro	Glu	Thr	Pro	Leu 230	Arg	Ala	Glu	Pro	Pro 235	Ser	Ser	Tyr	Lys	Val 240
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Trp	Ser	Asn	Val	Phe 260	Pro	Val	Phe	Phe	Gln 265	Phe	Leu	Asn	Ile	Met 270
Val	Val	Gly	Ile	Thr 275	Gly	Ala	Ala	Val	Val 280	Ile	Thr	Ile	Leu	Lys 285
Val	Phe	Phe	Pro	Val 290	Ser	Glu	Tyr	Lys	Gly 295	Ile	Leu	Gln	Leu	Asp 300
Lys	Val	Asp	Val	Ile 305	Pro	Val	Thr	Ala	Ile 310	Asn	Leu	Tyr	Pro	Asp 315
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<211>	2498

<212> DNA

<213> Homo Sapien

<400> 40

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<211> 263

<212> PRT

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Asn	Pro	Ala	Pro	Gly	Gly	Val	Cys	Trp	Leu	Gln	Gln	Gly	Gln	Glu
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Ala	Thr	Cys	Ser	Leu	Val	Leu	Gln	Thr	Asp	Val	Thr	Arg	Ala	Glu
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Cys	Cys	Ala	Ser	Gly	Asn	Ile	Asp	Thr	Ala	Trp	Ser	Asn	Leu	Thr
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His	Pro	Gly	Asn	Lys	Ile	Asn	Leu	Leu	Gly	Phe	Leu	Gly	Leu	Val
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His	Cys	Leu	Pro	Cys	Lys	Asp	Ser	Cys	Asp	Gly	Val	Glu	Cys	Gly
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Gly	Ser	Asp	Gly	Ala	Thr	Tyr	Arg	Asp	Glu	Cys	Glu	Leu	Arg	Ala
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Ala	Arg	Cys	Arg	Gly	His	Pro	Asp	Leu	Ser	Val	Met	Tyr	Arg	Gly
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Arg	Cys	Arg	Lys	Ser	Cys	Glu	His	Val	Val	Cys	Pro	Arg	Pro	Gln
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Ser	Cys	Val	Val	Asp	Gln	Thr	Gly	Ser	Ala	His	Cys	Val	Val	Cys
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Gln	Ala	Thr	Cys	Phe	Leu	Gly	Arg	Ser	Ile	Gly	Val	Arg	His	Ala
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Gly	Ser	Cys	Ala	Gly	Thr	Pro	Glu	Glu	Pro	Pro	Gly	Gly	Glu	Ser
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<210> 43  
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<212> DNA

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<223> Synthetic oligonucleotide probe

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<210> 51

<211> 1690

<212> DNA

<213> Homo Sapien

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Ile	Tyr	Arg	Tyr	Gln 170	Ser	His	Asp	Tyr	Ala 175	Phe	Ser	Ser	Val	Glu 180
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Leu	Phe	Leu	Ser	Tyr	Asp	Tyr	Ala	Val	Lys	Lys	Pro	Trp	Leu	Ala
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Ala	Tyr	His	Arg	Trp	Asn	Gly	His	Thr	Asp	Met	Ile	Asp	Gln	Asp
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Phe	Asn	Glu	Thr	Cys 410	Leu	Lys	Leu	Asn	Arg 415	Arg	Ser	Arg	Lys	Val 420
Gly	Ser	Glu	His	Met 425	Tyr	Gln	Phe	Thr	Val 430	Leu	Gly	Gln	Arg	Trp 435
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Leu Arg Pro Gly	Thr Asn Tyr Asn Val	Ser Leu Arg Ala Leu Ser	
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Ser Glu Leu Pro	Val Val Ile Ser Leu	Thr Thr Gln Ile Thr Glu	
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Pro Pro Leu Pro	Glu Val Glu Phe Phe	Thr Val His Arg Gly Pro	
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Leu Pro Arg Leu	Arg Leu Arg Lys Ala	Lys Glu Lys Asn Gly Pro	
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Ile Ser Ser Tyr	Gln Val Leu Val Leu	Pro Leu Ala Leu Gln Ser	
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Thr Phe Ser Cys	Asp Ser Glu Gly Ala	Ser Ser Phe Phe Ser Asn	
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Ala Ser Asp Ala	Asp Gly Tyr Val Ala	Ala Glu Leu Leu Ala Lys	
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Asp Val Pro Asp	Asp Ala Met Glu Ile	Pro Ile Gly Asp Arg Leu	
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Tyr Tyr Gly Glu	Tyr Tyr Asn Ala Pro	Leu Lys Arg Gly Ser Asp	
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Tyr Cys Ile Ile	Leu Arg Ile Thr Ser	Glu Trp Asn Lys Val Arg	
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Arg His Ser Cys	Ala Val Trp Ala Gln	Val Lys Asp Ser Ser Leu	
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Met Leu Leu Gln	Met Ala Gly Val Gly	Leu Gly Ser Leu Ala Val	
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Ser	Ala	Glu	Thr	Ser 65	Ser	Arg	Ala	Ser	Thr 70	Pro	Ala	Gly	Pro	Ile 75
Pro	Glu	Ala	Glu	Thr 80	Arg	Gly	Ala	Lys	Arg 85	Ile	Ser	Pro	Ala	Arg 90
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Glu	Glu	Ala	Ile	Phe 140	Asp	Thr	Leu	Cys	Thr 145	Asp	Asp	Ser	Ser	Glu 150
Glu	Ala	Lys	Thr	Leu 155	Thr	Met	Asp	Ile	Leu 160	Thr	Leu	Ala	His	Thr 165
Ser	Thr	Glu	Ala	Lys 170	Gly	Leu	Ser	Ser	Glu 175	Ser	Ser	Ala	Ser	Ser 180
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Ala	Ser	Glu	Ser	Ser 215	Ala	Ser	Ser	Asp	Gly 220	Pro	His	Pro	Val	Ile 225
Thr	Pro	Ser	Trp	Ser 230	Pro	Gly	Ser	Asp	Val 235	Thr	Leu	Leu	Ala	Glu 240
Ala	Leu	Val	Thr	Val 245	Thr	Asn	Ile	Glu	Val 250	Ile	Asn	Cys	Ser	Ile 255
Thr	Glu	Ile	Glu	Thr 260	Thr	Thr	Ser	Ser	Ile 265	Pro	Gly	Ala	Ser	Asp 270
Ile	Asp	Leu	Ile	Pro 275	Thr	Glu	Gly	Val	Lys 280	Ala	Ser	Ser	Thr	Ser 285
Asp	Pro	Pro	Ala	Leu 290	Pro	Asp	Ser	Thr	Glu 295	Ala	Lys	Pro	His	Ile 300
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 gccaggtaaa atgtttgtgt tgcggtcagt cccatggcca caaggtgctg 600  
 ttcacttcaa cctgctggat gtagctaagg attggaatga caacccccgg 650  
 aaaaatttcg gggtattcct ggagatactg gtcaaagaag atagagactc 700  
 aggggtgaat tttcagcctg aagacacctg tgccagacta agatgctccc 750  
 ttcattgctt cctgctgggt gtgactctca accctgatca gtgccaccct 800  
 tctcggaaaa ggagagcagc catccctgtc cccaagcttt cttgtaagaa 850  
 cctctgccac cgtcaccagc tattcattaa cttccgggac ctgggttggc 900  
 acaagtggat cattgcccc aaggggttca tggcaaatta ctgccatgga 950  
 gagtgtccct tctcactgac catctctctc aacagctcca attatgcttt 1000  
 catgcaagcc ctgatgcatg ccgttgaccc agagatcccc caggctgtgt 1050  
 gtatccccac caagctgtct cccatttcca tgctctacca ggacaataat 1100  
 gacaatgtca ttctacgaca ttatgaagac atggtagtcg atgaatgtgg 1150  
 gtgtgggtag gatgtcagaa atgggaatag aaggagtgtt cttagggtaa 1200  
 atcttttaat aaaactacct atctgggtta tgaccactta gatcgaaatg 1250  
 tc 1252

<210> 65  
 <211> 364  
 <212> PRT  
 <213> Homo Sapien

<400> 65  
 Met Leu Arg Phe Leu Pro Asp Leu Ala Phe Ser Phe Leu Leu Ile  
 1 5 10 15  
 Leu Ala Leu Gly Gln Ala Val Gln Phe Gln Glu Tyr Val Phe Leu  
 20 25 30  
 Gln Phe Leu Gly Leu Asp Lys Ala Pro Ser Pro Gln Lys Phe Gln  
 35 40 45  
 Pro Val Pro Tyr Ile Leu Lys Lys Ile Phe Gln Asp Arg Glu Ala  
 50 55 60  
 Ala Ala Thr Thr Gly Val Ser Arg Asp Leu Cys Tyr Val Lys Glu  
 65 70 75  
 Leu Gly Val Arg Gly Asn Val Leu Arg Phe Leu Pro Asp Gln Gly

[illegible]

<210> 66  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 66  
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 <210> 67  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 67  
 tctccaattt ctgggcttag ataaggcgcc ttcaccccag aagttcc 47  
  
 <210> 68  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 68  
 gtcccagggt atagtaagaa ttgg 24  
  
 <210> 69  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 69  
 gtgttgcggt cagtcccatg 20  
  
 <210> 70  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 70  
 gctgtctccc atttccatgc 20  
  
 <210> 71  
 <211> 24  
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 71

cgactaccat gtcttcataa tgtc 24

<210> 72

<211> 2849

<212> DNA

<213> Homo Sapien

<400> 72

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 ggctgcagag acctcggaga ccgcgccggg gagacggagg tgctgtgggt 100  
 gggggggacc tgtggctgct cgtaccgccc cccacctctc tcttctgcac 150  
 tgccgtctct cggaagacct tttcccttgc tctgttttct tcaccgagtc 200  
 tgtgcatcgc cccggacctg gccgggagga ggcttgggcg gcgggagatg 250  
 ctctaggggc ggcgcgggag gagcggccgg cgggacggag ggcccggcag 300  
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 ttgcctttgc ctctggcctg gtctgagtc gtgtgccccca tgtccagggg 400  
 gaacagcagg agtgggaggg gactgaggag ctgccgtcgc ctccggacca 450  
 tgccgagagg gctgaagaac aacatgaaaa atacaggccc agtcaggacc 500  
 aggggctccc tgcttcccgg tgcttgcgct gctgtgacct cggtagctcc 550  
 atgtaccggc cgaccgccgt gcccagatc aacatcacta tcttgaaagg 600  
 ggagaagggg gaccgaggag atcgaggcct ccaagggaaa tatggcaaaa 650  
 caggctcagc agggggccagg ggccacactg gacccaaagg gcagaagggc 700  
 tccatggggg cccctgggga gcggtgcaag agccactacg ccgccttttc 750  
 ggtggggcgg aagaagccca tgcacagcaa ccactactac cagacgggtga 800  
 tcttcgacac ggagttcgtg aacctctacg accacttcaa catgttcacc 850  
 ggcaagttct actgtacgt gcccggcctc tactttcttca gcctcaacgt 900  
 gcacacctgg aaccagaagg agacctacct gcacatcatg aagaacgagg 950  
 aggaggtggt gatcttggtc gcgcagggtg gcgaccgcag catcatgcaa 1000  
 agccagagcc tgatgctgga gctgagagag caggaccagg tgtgggtacg 1050  
 cctctacaag ggcgaaactg agaacgcat cttcagcgag gagctggaca 1100

cctacatcac cttcagtggc tacctgggtca agcacgccac cgagccctag 1150  
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tgaccccccacc gcctcttccc cgatccctgg actccgactc cctggctttg 1250  
gcattcagtg agacgccctg cacacacaga aagccaaagc gatcgggtgct 1300  
cccagatccc gcagcctctg gagagagctg acggcagatg aaatcaccag 1350  
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cacatcctca agtgaccccg cacggcgaga cgcggtggc ggcagggcgt 1450  
cccaggggtgc ggcaccgcgg ctccagtcct tggaaataat taggcaaatt 1500  
ctaaaggtct caaaaggagc aaagtaaacc gtggaggaca aagaaaaggg 1550  
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ttttcagttg agactctgct taagagaaga tccaaagtta aagctctggg 1650  
gtcaggggag gggccggggg caggaaacta cctctggctt aattctttta 1700  
agccacgtag gaactttctt gagggatagg tggacctga catccctgtg 1750  
gccttgccca agggctctgc tggctttctt gagtacagc tgcgaggtga 1800  
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ctgccttggc tccaggttgg tagaagcagc cgaagggtc ctgacagtgg 1900  
ccagggaccc ctgggtcccc caggcctgca gatgtttcta tgaggggcag 1950  
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tctccacctc accccatggt gatgccagg gtcactcttg ctaccgctg 2600  
 ggcccccaaa ccccgctgc ctctcttctt tccccccatc cccacctgg 2650  
 ttttgactaa tctgcttcc ctctctgggc ctggctgccg ggatctgggg 2700  
 tccctaagtc cctctcttta aagaattctt gcggggtcaga ctctgaagcc 2750  
 gagttgctgt gggcgtgccc ggaagcagag cgccacactc gctgcttaag 2800  
 ctccccagc tctttccaga aaacattaaa ctcagaattg tgttttcaa 2849

<210> 73  
 <211> 281  
 <212> PRT  
 <213> Homo Sapien

<400> 73  
 Met Gly Ser Arg Gly Gln Gly Leu Leu Leu Ala Tyr Cys Leu Leu  
 1 5 10 15  
 Leu Ala Phe Ala Ser Gly Leu Val Leu Ser Arg Val Pro His Val  
 20 25 30  
 Gln Gly Glu Gln Gln Glu Trp Glu Gly Thr Glu Glu Leu Pro Ser  
 35 40 45  
 Pro Pro Asp His Ala Glu Arg Ala Glu Glu Gln His Glu Lys Tyr  
 50 55 60  
 Arg Pro Ser Gln Asp Gln Gly Leu Pro Ala Ser Arg Cys Leu Arg  
 65 70 75  
 Cys Cys Asp Pro Gly Thr Ser Met Tyr Pro Ala Thr Ala Val Pro  
 80 85 90  
 Gln Ile Asn Ile Thr Ile Leu Lys Gly Glu Lys Gly Asp Arg Gly  
 95 100 105  
 Asp Arg Gly Leu Gln Gly Lys Tyr Gly Lys Thr Gly Ser Ala Gly  
 110 115 120  
 Ala Arg Gly His Thr Gly Pro Lys Gly Gln Lys Gly Ser Met Gly  
 125 130 135  
 Ala Pro Gly Glu Arg Cys Lys Ser His Tyr Ala Ala Phe Ser Val  
 140 145 150  
 Gly Arg Lys Lys Pro Met His Ser Asn His Tyr Tyr Gln Thr Val  
 155 160 165  
 Ile Phe Asp Thr Glu Phe Val Asn Leu Tyr Asp His Phe Asn Met  
 170 175 180  
 Phe Thr Gly Lys Phe Tyr Cys Tyr Val Pro Gly Leu Tyr Phe Phe  
 185 190 195  
 Ser Leu Asn Val His Thr Trp Asn Gln Lys Glu Thr Tyr Leu His

	200		205		210
Ile Met Lys Asn	Glu Glu Glu Val Val	Ile Leu Phe Ala Gln Val			
	215		220		225
Gly Asp Arg Ser	Ile Met Gln Ser Gln	Ser Leu Met Leu Glu Leu			
	230		235		240
Arg Glu Gln Asp	Gln Val Trp Val Arg	Leu Tyr Lys Gly Glu Arg			
	245		250		255
Glu Asn Ala Ile	Phe Ser Glu Glu Leu	Asp Thr Tyr Ile Thr Phe			
	260		265		270
Ser Gly Tyr Leu	Val Lys His Ala Thr	Glu Pro			
	275		280		

<210> 74  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 74  
 tacaggccca gtcaggacca gggg 24

<210> 75  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 75  
 ctgaagaagt agaggccggg cacg 24

<210> 76  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 76  
 cccggtgctt gcgctgctgt gaccccggtta cctccatgta cccgg 45

<210> 77  
 <211> 1042  
 <212> DNA  
 <213> Homo Sapien

<400> 77  
 gaattcggca cgagggaaga agagaaagaa aatctccggg gctgctggga 50

gcatataaag aagccctgtg gccttgctgg ttttaccatc cagaccagag 100  
tcaggccaca gacggacatg gctgctcaag gctgggtccat gtccttgctg 150  
gctgtcctta acctagcat cttcgtccgt ccctgtgaca ctcaagagct 200  
acgatgtctg tgtattcagg aacactctga attcattcct ctcaaactca 250  
ttaaaaatat aatgggtgata ttcgagacca tttactgcaa cagaaaggaa 300  
gtgatagcag tcccaaaaaa tgggagtatg atttgtttgg atcctgatgc 350  
tccatgggtg aaggctactg ttggcccaat tactaacagg ttccctacctg 400  
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gttgagcatg aaaagcctct atatctttca tttgggagac ctgagaacaa 500  
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gcgttagtct ggtgtatgga tctatgagct ctctttttaa attttattat 750  
aaatgtttta tttacttaac ttccctagtga atgttcacag gtgactgctc 800  
cccatcccc atttcttgat attacatata atggcatcat atacccttt 850  
attgactgac aaactactca gattgcttaa cattttgtgc ttcaaagtct 900  
tatcccactc cactatgggc tgttacagag tgcctctcgg tgtagagcaa 950  
ggctccttgt cttcagtgcc ccagggtgaa atacttcttt gaaaaatttt 1000  
cattcatcag aaaatctgaa ataaaaatat gtcttaattg ag 1042

<210> 78  
<211> 167  
<212> PRT  
<213> Homo Sapien

<400> 78  
Met Ala Ala Gln Gly Trp Ser Met Leu Leu Leu Ala Val Leu Asn  
1 5 10 15  
Leu Gly Ile Phe Val Arg Pro Cys Asp Thr Gln Glu Leu Arg Cys  
20 25 30  
Leu Cys Ile Gln Glu His Ser Glu Phe Ile Pro Leu Lys Leu Ile  
35 40 45  
Lys Asn Ile Met Val Ile Phe Glu Thr Ile Tyr Cys Asn Arg Lys  
50 55 60







<223> Synthetic oligonucleotide probe

<400> 82  
gacccctaaa gggccatag 19

<210> 83  
<211> 924  
<212> DNA  
<213> Homo Sapien

<400> 83  
aaggagcagc ccgcaagcac caagtgagag gcatgaagtt acagtgtgtt 50  
tccctttggc tcttgggtac aatactgata ttgtgtctcag tagacaacca 100  
eggtctcagg agatgtctga tttccacaga catgcacat atagaagaga 150  
gtttccaaga aatcaaaaga gccatccaag ctaaggacac cttcccaa 200  
gtcactatcc tgtccacatt ggagactctg cagatcatta agcccttaga 250  
tgtgtgtctgc gtgaccaaga acctcctggc gttctacgtg gacaggggtgt 300  
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attgccaaact ctttcctcta catgcagaaa actctgcggc aatgtcagga 400  
acagaggcag tgtcactgca ggcaggaagc caccaatgcc accagagtca 450  
tccatgacaa ctatgatcag ctggaggtcc acgtgtctgc cattaaatcc 500  
ctgggagagc tcgacgtctt tctagcctgg attaataaga atcatgaagt 550  
aatgtttctca gcttgatgac aaggaacctg tatagtgtatc cagggatgaa 600  
caccacctgt gcggtttact gtgggagaca gccaccttg aaggggaagg 650  
agatggggaa ggcacctgac agctgaaagt cccactggct ggcctcaggc 700  
tgtcttattc cgcttgaaaa taggcaaaaa gtctactgtg gtatttgtaa 750  
taaactctat ctgctgaaag ggcctgcagg ccatcctggg agtaaagggc 800  
tgccttccca tctaatttat tgtaaagtca tatagtccat gtctgtgatg 850  
tgagccaagt gatatcctgt agtacacatt gtactgagtg gtttttctga 900  
ataaattcca tattttacct atga 924

<210> 84  
<211> 177  
<212> PRT  
<213> Homo Sapien

<400> 84  
Met Lys Leu Gln Cys Val Ser Leu Trp Leu Leu Gly Thr Ile Leu  
1 5 10 15

Ile	Leu	Cys	Ser	Val	Asp	Asn	His	Gly	Leu	Arg	Arg	Cys	Leu	Ile
				20					25					30
Ser	Thr	Asp	Met	His	His	Ile	Glu	Glu	Ser	Phe	Gln	Glu	Ile	Lys
				35					40					45
Arg	Ala	Ile	Gln	Ala	Lys	Asp	Thr	Phe	Pro	Asn	Val	Thr	Ile	Leu
				50					55					60
Ser	Thr	Leu	Glu	Thr	Leu	Gln	Ile	Ile	Lys	Pro	Leu	Asp	Val	Cys
				65					70					75
Cys	Val	Thr	Lys	Asn	Leu	Leu	Ala	Phe	Tyr	Val	Asp	Arg	Val	Phe
				80					85					90
Lys	Asp	His	Gln	Glu	Pro	Asn	Pro	Lys	Ile	Leu	Arg	Lys	Ile	Ser
				95					100					105
Ser	Ile	Ala	Asn	Ser	Phe	Leu	Tyr	Met	Gln	Lys	Thr	Leu	Arg	Gln
				110					115					120
Cys	Gln	Glu	Gln	Arg	Gln	Cys	His	Cys	Arg	Gln	Glu	Ala	Thr	Asn
				125					130					135
Ala	Thr	Arg	Val	Ile	His	Asp	Asn	Tyr	Asp	Gln	Leu	Glu	Val	His
				140					145					150
Ala	Ala	Ala	Ile	Lys	Ser	Leu	Gly	Glu	Leu	Asp	Val	Phe	Leu	Ala
				155					160					165
Trp	Ile	Asn	Lys	Asn	His	Glu	Val	Met	Phe	Ser	Ala			
				170					175					

<210> 85  
 <211> 2137  
 <212> DNA  
 <213> Homo Sapien

<400> 85  
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 gaaaccgggc cgctaagcga ggctctctcc tcccgcagat ccgaacggcc 100  
 tgggcgggggt caccctgggt gggacaagaa gccgcgcct gcctgcccgg 150  
 gcccggggag ggggctgggg ctggggccgg aggcgggggtg tgagtgggtg 200  
 tgtgcggggg gcggaggctt gatgcaatcc cgataagaaa tgctcggggtg 250  
 tcttgggcac ctaccctgtg ggcccgtgtaag gcgctactat ataaggctgc 300  
 cggcccggag ccgcgcgcgc gtcagagcag gagcgctgcg tccaggatct 350  
 agggccacga ccattcccaac ccggcactca cagccccgca gcgcatcccc 400  
 gtcgcgcgcc agctctccgc acccccatcg ccggagctgc gccgagagcc 450  
 ccaggagggt gccatgcgga gcgggtgtgt ggtggtccac gtatggatcc 500



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<210> 87  
 <211> 26  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 87  
 atccgcccag atggctacaa tgtgta 26

<210> 88  
 <211> 42  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 88  
 gcctccccgt ctccttgagc agtgccaaac agcggcagtg ta 42

<210> 89  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 89  
 ccagtcgggt gacaagccca aa 22

<210> 90  
 <211> 1857  
 <212> DNA  
 <213> Homo Sapien

<400> 90  
 gtctgttccc aggagtcctt cggcggtgt tgtgtcagtg gcctgatcgc 50  
 gatggggaca aaggcgcaag tcgagaggaa actgttgtgc ctcttcatat 100  
 tggcgatcct gttgtgctcc ctggcattgg gcagtgttac agtgcaactct 150  
 tctgaacctg aagtcagaat tcttgagaat aatcctgtga agttgtcctg 200  
 tgccactcgc ggctttttctt ctccccgtgt ggagtgggaag tttgaccaag 250  
 gagacaccac cagactcgtt tgctataata acaagatcac agcttcctat 300  
 gaggaccggg tgaccttctt gccaaactgg atcaccttca agtccgtgac 350  
 acgggaagac actgggacat acacttgtat ggtctctgag gaaggcggca 400  
 acagctatgg ggagggtcaag gtcaagctca tcgtgcttgt gcctccatcc 450  
 aagcctacag ttaacatccc ctctctgcc accattggga accgggcagt 500

gctgacatgc tcagaacaag atgggtccccc accttctgaa tacacctggt 550  
tcaaagatgg gatagtgatg cctacgaatc ccaaaagcac ccgtgccttc 600  
agcaactctt cctatgtcct gaatcccaca acaggagagc tggctctttga 650  
tcccctgtca gcctctgata ctggagaata cagctgtgag gcacggaatg 700  
ggatggggac acccatgact tcaaattgctg tgcgcatgga agctgtggag 750  
cggaatgtgg ggggtcatcgt ggcagccgctc cttgtaaccc tgattctcct 800  
gggaatcttg gtttttggca tctgggtttgc ctatagccga ggccactttg 850  
acagaacaaa gaaagggact tcgagtaaga aggtgattta cagccagcct 900  
agtgcgccga gtgaaggaga attcaaacag acctcgatcat tcctgggtgtg 950  
agcctgggtcg gctcaccgcc tatcatctgc atttgcctta ctcaggtgct 1000  
accggactct ggcacctgat gtctgtagtt tcacaggatg ccttatttgt 1050  
cttctacacc ccacagggcc cctacttctc tcggatgtgt ttttaataat 1100  
gtcagctatg tgcccatcc tccttcatgc cctccctccc tttcctacca 1150  
ctgctgagtg gcctggaact tgtttaaagt gtttattccc catttctttg 1200  
agggatcagg aaggaatcct gggatgccca ttgacttccc ttctaagtag 1250  
acagcaaaaa tggcgggggt cgcaggaatc tgcactcaac tgcccacctg 1300  
gctggcaggg atctttgaat aggtatcttg agcttggttc tgggctcttt 1350  
ccttgtgtac tgacgaccag ggccagctgt tctagagcgg gaattagagg 1400  
ctagagcggc tgaaatgggt gtttgggtgat gacactgggg tccttccatc 1450  
tctggggccc actctcttct gtcttcccat ggggaagtgcc actgggatcc 1500  
ctctgccctg tcctcctgaa tacaagctga ctgacattga ctgtgtctgt 1550  
ggaaaatggg agctcttggt gtggagagca tagtaaattt tcagagaact 1600  
tgaagccaaa aggatttaaa accgctgctc taaagaaaag aaaactggag 1650  
gctgggcgca gtggctcagc cctgtaatcc cagaggctga ggcaggcgga 1700  
tcacctgagg tcgggagttc gggatcagcc tgaccaacat ggagaaaccc 1750  
tactggaaat acaaagttag ccaggcatgg tggatcatgc ctgtagtccc 1800  
agctgctcag gagcctggca acaagagcaa aactccagct caaaaaaaaa 1850  
aaaaaaaa 1857

<210> 91  
<211> 299



<212> PRT

<213> Homo Sapien

<400> 91

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Ile	Leu	Ala	Ile	Leu	Leu	Cys	Ser	Leu	Ala	Leu	Gly	Ser	Val	Thr	20	25	30	
Val	His	Ser	Ser	Glu	Pro	Glu	Val	Arg	Ile	Pro	Glu	Asn	Asn	Pro	35	40	45	
Val	Lys	Leu	Ser	Cys	Ala	Tyr	Ser	Gly	Phe	Ser	Ser	Pro	Arg	Val	50	55	60	
Glu	Trp	Lys	Phe	Asp	Gln	Gly	Asp	Thr	Thr	Arg	Leu	Val	Cys	Tyr	65	70	75	
Asn	Asn	Lys	Ile	Thr	Ala	Ser	Tyr	Glu	Asp	Arg	Val	Thr	Phe	Leu	80	85	90	
Pro	Thr	Gly	Ile	Thr	Phe	Lys	Ser	Val	Thr	Arg	Glu	Asp	Thr	Gly	95	100	105	
Thr	Tyr	Thr	Cys	Met	Val	Ser	Glu	Glu	Gly	Gly	Asn	Ser	Tyr	Gly	110	115	120	
Glu	Val	Lys	Val	Lys	Leu	Ile	Val	Leu	Val	Pro	Pro	Ser	Lys	Pro	125	130	135	
Thr	Val	Asn	Ile	Pro	Ser	Ser	Ala	Thr	Ile	Gly	Asn	Arg	Ala	Val	140	145	150	
Leu	Thr	Cys	Ser	Glu	Gln	Asp	Gly	Ser	Pro	Pro	Ser	Glu	Tyr	Thr	155	160	165	
Trp	Phe	Lys	Asp	Gly	Ile	Val	Met	Pro	Thr	Asn	Pro	Lys	Ser	Thr	170	175	180	
Arg	Ala	Phe	Ser	Asn	Ser	Ser	Tyr	Val	Leu	Asn	Pro	Thr	Thr	Gly	185	190	195	
Glu	Leu	Val	Phe	Asp	Pro	Leu	Ser	Ala	Ser	Asp	Thr	Gly	Glu	Tyr	200	205	210	
Ser	Cys	Glu	Ala	Arg	Asn	Gly	Tyr	Gly	Thr	Pro	Met	Thr	Ser	Asn	215	220	225	
Ala	Val	Arg	Met	Glu	Ala	Val	Glu	Arg	Asn	Val	Gly	Val	Ile	Val	230	235	240	
Ala	Ala	Val	Leu	Val	Thr	Leu	Ile	Leu	Leu	Gly	Ile	Leu	Val	Phe	245	250	255	
Gly	Ile	Trp	Phe	Ala	Tyr	Ser	Arg	Gly	His	Phe	Asp	Arg	Thr	Lys	260	265	270	

74

<400> 96  
 ttgccttact caggtgctac 20

<210> 97  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 97  
 actcagcagt ggtaggaaag 20

<210> 98  
 <211> 1200  
 <212> DNA  
 <213> Homo Sapien

<400> 98  
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 gtgagggacc agggcgccat gaccgaccag ctgagcaggc ggcagatccg 150  
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 ggcgtcgcat ctccgccacc gccgaggacg gcaacaagtt tgccaagctc 250  
 atagtggaga cggacacggt tggcagccgg gttcgcatca aaggggctga 300  
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 aactatacgg ccttcagaa cgcccggcac gagggctggg tcatggcctt 450  
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 tgtaggaagg gacttttgtt tgtttgtttg tttcaggaaa aaagaaaggg 1100  
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<210> 99  
 <211> 205  
 <212> PRT  
 <213> Homo Sapien

<400> 99  
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 Ala Met Thr Asp Gln Leu Ser Arg Arg Gln Ile Arg Glu Tyr Gln  
 35 40 45  
 Leu Tyr Ser Arg Thr Ser Gly Lys His Val Gln Val Thr Gly Arg  
 50 55 60  
 Arg Ile Ser Ala Thr Ala Glu Asp Gly Asn Lys Phe Ala Lys Leu  
 65 70 75  
 Ile Val Glu Thr Asp Thr Phe Gly Ser Arg Val Arg Ile Lys Gly  
 80 85 90  
 Ala Glu Ser Glu Lys Tyr Ile Cys Met Asn Lys Arg Gly Lys Leu  
 95 100 105  
 Ile Gly Lys Pro Ser Gly Lys Ser Lys Asp Cys Val Phe Thr Glu  
 110 115 120  
 Ile Val Leu Glu Asn Asn Tyr Thr Ala Phe Gln Asn Ala Arg His  
 125 130 135  
 Glu Gly Trp Phe Met Ala Phe Thr Arg Gln Gly Arg Pro Arg Gln  
 140 145 150  
 Ala Ser Arg Ser Arg Gln Asn Gln Arg Glu Ala His Phe Ile Lys  
 155 160 165  
 Arg Leu Tyr Gln Gly Gln Leu Pro Phe Pro Asn His Ala Glu Lys  
 170 175 180  
 Gln Lys Gln Phe Glu Phe Val Gly Ser Ala Pro Thr Arg Arg Thr  
 185 190 195  
 Lys Arg Thr Arg Arg Pro Gln Pro Leu Thr  
 200 205

<210> 100  
 <211> 28  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 100  
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<210> 101  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 101  
 ccggtgacct gcacgtgctt gccca 24

<210> 102  
 <211> 41  
 <212> DNA  
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<220>  
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<220>  
 <221> unsure  
 <222> 21  
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<210> 103  
 <211> 1679  
 <212> DNA  
 <213> Homo Sapien

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 agagcaacac aatctatcag gaaagaaaga aagaaaaaaa ccgaacctga 100  
 caaaaaagaa gaaaaagaag aagaaaaaaa atcatgaaaa ccatccagcc 150  
 aaaaatgcac aattctatct cttgggcaat cttcacgggg ctggctgctc 200  
 tgtgtctctt ccaaggagtg cccgtgcgca gcggagatgc caccttcccc 250  
 aaagctatgg acaacgtgac ggtccggcag ggggagagcg ccaccctcag 300  
 gtgcactatt gacaaccggg tcacccgggt ggctgggcta aaccgcagca 350

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ccatcctcta tgctgggaat gacaagtggg gcctggatcc tcgcgtgggc 400
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tgtgtatgac gagggccctt acacctgtgc ggtgcagaca gacaaccacc 500
caaagacctc taggggtccac ctcatgtgtc aagtatctcc caaaattgta 550
gagatttctt cagatatctc cattaatgaa gggacaataa ttagcctcac 600
ctgcatagca actggtagac cagagcctac ggttacttgg agacacatct 650
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cttttcccaa acgggaagaa cacagcacac ccggcttggg cccactgcaa 1450
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tetgcccaca gagtgcccc acgtggaaca ttctggagct ggccatccca 1550
aattcaatca gtccatagag acgaacagaa tgagaccttc cggcccaagc 1600
gtggcgctgc gggcactttg gtagactgtg ccaccacggc gtgtgttgtg 1650
aaacgtgaaa taaaagagc aaaaaaaaa 1679

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<210> 104
<211> 344
<212> PRT
<213> Homo Sapien

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Ser Glu His Asp Tyr Gly Asn Tyr Thr Cys Val Ala Ser Asn Lys  
 290 295 300  
 Leu Gly His Thr Asn Ala Ser Ile Met Leu Phe Gly Pro Gly Ala  
 305 310 315  
 Val Ser Glu Val Ser Asn Gly Thr Ser Arg Arg Ala Gly Cys Val  
 320 325 330  
 Trp Leu Leu Pro Leu Leu Val Leu His Leu Leu Leu Lys Phe  
 335 340

<210> 105  
 <211> 1734  
 <212> DNA  
 <213> Homo Sapien

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 agacactctg gagagagagg gggctgggca gagatgaagt tccagggggcc 200  
 cctggcctgc ctctgctgg ccctctgcct gggcagtgagg gaggtggcc 250  
 ccctgcagag cggagaggaa agcactggga caaatattgg ggaggccctt 300  
 ggacatggcc tgggagacgc cctgagcgaa ggggtgggaa aggccattgg 350  
 caaagaggcc ggaggggag ctggctctaa agtcagttag gcccttggcc 400  
 aagggaccag agaagcagtt ggcactggag tcaggcaggt tccaggcttt 450  
 ggcgcagcag atgctttggg caacagggtc ggggaagcag cccatgctct 500  
 gggaaacact gggcacgaga ttggcagaca ggcagaagat gtcattcgac 550  
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 ggtgcttggg aaacttctgg aggccatggc atctttggct ctcaaggtgg 650  
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gcagtggcag cagcagtggc agcagcagtg gcggcagcag tggcggcagc 1050  
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 tgagtccctcc tggggatcca gcaccggctc ctcctccggc aaccacggtg 1150  
 ggagcggcgg aggaaatgga cataaaccgc ggtgtgaaaa gccagggaat 1200  
 gaagcccgcg ggagcgggga atctgggatt cagggcttca gaggacaggg 1250  
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 ccgtgacctc cagacaagga gccaccagat tggatgggag cccccacact 1550  
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<210> 106  
 <211> 440  
 <212> PRT  
 <213> Homo Sapien

<400> 106  
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 20 25 30  
 Thr Gly Thr Asn Ile Gly Glu Ala Leu Gly His Gly Leu Gly Asp  
 35 40 45  
 Ala Leu Ser Glu Gly Val Gly Lys Ala Ile Gly Lys Glu Ala Gly  
 50 55 60  
 Gly Ala Ala Gly Ser Lys Val Ser Glu Ala Leu Gly Gln Gly Thr  
 65 70 75  
 Arg Glu Ala Val Gly Thr Gly Val Arg Gln Val Pro Gly Phe Gly  
 80 85 90  
 Ala Ala Asp Ala Leu Gly Asn Arg Val Gly Glu Ala Ala His Ala  
 95 100 105  
 Leu Gly Asn Thr Gly His Glu Ile Gly Arg Gln Ala Glu Asp Val

Ile Arg His Gly	Ala Asp Ala Val Arg	Gly Ser Trp Gln Gly Val
125	130	135
Pro Gly His Ser	Gly Ala Trp Glu Thr	Ser Gly Gly His Gly Ile
140	145	150
Phe Gly Ser Gln	Gly Gly Leu Gly Gly	Gln Gly Gln Gly Asn Pro
155	160	165
Gly Gly Leu Gly	Thr Pro Trp Val His	Gly Tyr Pro Gly Asn Ser
170	175	180
Ala Gly Ser Phe	Gly Met Asn Pro Gln	Gly Ala Pro Trp Gly Gln
185	190	195
Gly Gly Asn Gly	Gly Pro Pro Asn Phe	Gly Thr Asn Thr Gln Gly
200	205	210
Ala Val Ala Gln	Pro Gly Tyr Gly Ser	Val Arg Ala Ser Asn Gln
215	220	225
Asn Glu Gly Cys	Thr Asn Pro Pro Pro	Ser Gly Ser Gly Gly Gly
230	235	240
Ser Ser Asn Ser	Gly Gly Gly Ser Gly	Ser Gln Ser Gly Ser Ser
245	250	255
Gly Ser Gly Ser	Asn Gly Asp Asn Asn	Asn Gly Ser Ser Ser Gly
260	265	270
Gly Ser Ser Ser	Gly Ser Ser Ser Gly	Ser Ser Ser Gly Gly Ser
275	280	285
Ser Gly Gly Ser	Ser Gly Gly Ser Ser	Gly Asn Ser Gly Gly Ser
290	295	300
Arg Gly Asp Ser	Gly Ser Glu Ser Ser	Trp Gly Ser Ser Thr Gly
305	310	315
Ser Ser Ser Gly	Asn His Gly Gly Ser	Gly Gly Gly Asn Gly His
320	325	330
Lys Pro Gly Cys	Glu Lys Pro Gly Asn	Glu Ala Arg Gly Ser Gly
335	340	345
Glu Ser Gly Ile	Gln Gly Phe Arg Gly	Gln Gly Val Ser Ser Asn
350	355	360
Met Arg Glu Ile	Ser Lys Glu Gly Asn	Arg Leu Leu Gly Gly Ser
365	370	375
Gly Asp Asn Tyr	Arg Gly Gln Gly Ser	Ser Trp Gly Ser Gly Gly
380	385	390
Gly Asp Ala Val	Gly Gly Val Asn Thr	Val Asn Ser Glu Thr Ser
395	400	405

Pro Gly Met Phe Asn Phe Asp Thr Phe Trp Lys Asn Phe Lys Ser  
 410 415 420  
 Lys Leu Gly Phe Ile Asn Trp Asp Ala Ile Asn Lys Asp Gln Arg  
 425 430 435  
 Ser Ser Arg Ile Pro  
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<210> 107  
 <211> 918  
 <212> DNA  
 <213> Homo Sapien

<400> 107  
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 ctgcgctctg cctgacaggg tcccaagccc tgcagtgcga cagctttgag 150  
 cacacctact ttggcccctt tgacctcagg gccatgaagc tgcccagcat 200  
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 ggtgcgcgcc tgcacaactg acaaatgcaa cggccacctc atgactcatg 400  
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 gccgagtgtt acgcctgtat cgggggtccac caggatgact gcgctatcgg 500  
 cagggtccga cgagtcaggt gtcaccagga ccagaccgac tgcttccagg 550  
 gcagtggcag aatgacagtt ggcaatttct cagtccctgt gtacatcaga 600  
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 agccatcgac ctccaggggt cctgctgtga ggggtacctc tgcaacagga 700  
 aatccatgac ccagcccttc accagtgttt cagccaccac cctccccga 750  
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 ctgagcatag accgcccctc caggatgtgt gggacagggc tcacacacct 850  
 cattcttgtt gcttcagccc ctatcacata gctcactgga aaatgatgtt 900  
 aaagtaagaa ttgcaaaa 918

<210> 108  
 <211> 251  
 <212> PRT  
 <213> Homo Sapien



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tttgtatgaa aaa 1813

<210> 110  
<211> 390  
<212> PRT  
<213> Homo Sapien

<400> 110  
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Leu Gln Leu His Leu Pro Ala Asn Arg Leu Gln Ala Val Glu Gly  
35 40 45  
Gly Glu Val Val Leu Pro Ala Trp Tyr Thr Leu His Gly Glu Val  
50 55 60  
Ser Ser Ser Gln Pro Trp Glu Val Pro Phe Val Met Trp Phe Phe  
65 70 75  
Lys Gln Lys Glu Lys Glu Asp Gln Val Leu Ser Tyr Ile Asn Gly  
80 85 90  
Val Thr Thr Ser Lys Pro Gly Val Ser Leu Val Tyr Ser Met Pro  
95 100 105  
Ser Arg Asn Leu Ser Leu Arg Leu Glu Gly Leu Gln Glu Lys Asp  
110 115 120  
Ser Gly Pro Tyr Ser Cys Ser Val Asn Val Gln Asp Lys Gln Gly  
125 130 135  
Lys Ser Arg Gly His Ser Ile Lys Thr Leu Glu Leu Asn Val Leu  
140 145 150  
Val Pro Pro Ala Pro Pro Ser Cys Arg Leu Gln Gly Val Pro His  
155 160 165  
Val Gly Ala Asn Val Thr Leu Ser Cys Gln Ser Pro Arg Ser Lys  
170 175 180

Pro	Ala	Val	Gln	Tyr	Gln	Trp	Asp	Arg	Gln	Leu	Pro	Ser	Phe	Gln
				185					190					195
Thr	Phe	Phe	Ala	Pro	Ala	Leu	Asp	Val	Ile	Arg	Gly	Ser	Leu	Ser
				200					205					210
Leu	Thr	Asn	Leu	Ser	Ser	Ser	Met	Ala	Gly	Val	Tyr	Val	Cys	Lys
				215					220					225
Ala	His	Asn	Glu	Val	Gly	Thr	Ala	Gln	Cys	Asn	Val	Thr	Leu	Glu
				230					235					240
Val	Ser	Thr	Gly	Pro	Gly	Ala	Ala	Val	Val	Ala	Gly	Ala	Val	Val
				245					250					255
Gly	Thr	Leu	Val	Gly	Leu	Gly	Leu	Leu	Ala	Gly	Leu	Val	Leu	Leu
				260					265					270
Tyr	His	Arg	Arg	Gly	Lys	Ala	Leu	Glu	Glu	Pro	Ala	Asn	Asp	Ile
				275					280					285
Lys	Glu	Asp	Ala	Ile	Ala	Pro	Arg	Thr	Leu	Pro	Trp	Pro	Lys	Ser
				290					295					300
Ser	Asp	Thr	Ile	Ser	Lys	Asn	Gly	Thr	Leu	Ser	Ser	Val	Thr	Ser
				305					310					315
Ala	Arg	Ala	Leu	Arg	Pro	Pro	His	Gly	Pro	Pro	Arg	Pro	Gly	Ala
				320					325					330
Leu	Thr	Pro	Thr	Pro	Ser	Leu	Ser	Ser	Gln	Ala	Leu	Pro	Ser	Pro
				335					340					345
Arg	Leu	Pro	Thr	Thr	Asp	Gly	Ala	His	Pro	Gln	Pro	Ile	Ser	Pro
				350					355					360
Ile	Pro	Gly	Gly	Val	Ser	Ser	Ser	Gly	Leu	Ser	Arg	Met	Gly	Ala
				365					370					375
Val	Pro	Val	Met	Val	Pro	Ala	Gln	Ser	Gln	Ala	Gly	Ser	Leu	Val
				380					385					390

<210> 111

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 111

agggtctcca ggagaaagac tc 22

<210> 112

<211> 24

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 112

attgtgggcc ttgcagacat agac 24

<210> 113

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 113

ggccacagca tcaaacctt agaactcaat gtactgggtc ctccagctcc 50

<210> 114

<211> 2479

<212> DNA

<213> Homo Sapien

<400> 114

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 Phe Val Tyr Cys Asn Glu Arg Ser Leu Thr Ser Val Pro Leu Gly  
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 Ile Pro Glu Gly Val Thr Val Leu Tyr Leu His Asn Asn Gln Ile  
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 80 85 90  
 His Thr Val Tyr Leu Tyr Gly Asn Gln Leu Asp Glu Phe Pro Met  
 95 100 105  
 Asn Leu Pro Lys Asn Val Arg Val Leu His Leu Gln Glu Asn Asn  
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 Ile Gln Thr Ile Ser Arg Ala Ala Leu Ala Gln Leu Leu Lys Leu  
 125 130 135  
 Glu Glu Leu His Leu Asp Asp Asn Ser Ile Ser Thr Val Gly Val  
 140 145 150  
 Glu Asp Gly Ala Phe Arg Glu Ala Ile Ser Leu Lys Leu Leu Phe  
 155 160 165  
 Leu Ser Lys Asn His Leu Ser Ser Val Pro Val Gly Leu Pro Val  
 170 175 180  
 Asp Leu Gln Glu Leu Arg Val Asp Glu Asn Arg Ile Ala Val Ile  
 185 190 195  
 Ser Asp Met Ala Phe Gln Asn Leu Thr Ser Leu Glu Arg Leu Ile  
 200 205 210  
 Val Asp Gly Asn Leu Leu Thr Asn Lys Gly Ile Ala Glu Gly Thr  
 215 220 225  
 Phe Ser His Leu Thr Lys Leu Lys Glu Phe Ser Ile Val Arg Asn

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Ser	Leu	Ser	His	Pro 245	Pro	Pro	Asp	Leu	Pro 250	Gly	Thr	His	Leu	Ile 255
Arg	Leu	Tyr	Leu	Gln 260	Asp	Asn	Gln	Ile	Asn 265	His	Ile	Pro	Leu	Thr 270
Ala	Phe	Ser	Asn	Leu 275	Arg	Lys	Leu	Glu	Arg 280	Leu	Asp	Ile	Ser	Asn 285
Asn	Gln	Leu	Arg	Met 290	Leu	Thr	Gln	Gly	Val 295	Phe	Asp	Asn	Leu	Ser 300
Asn	Leu	Lys	Gln	Leu 305	Thr	Ala	Arg	Asn	Asn 310	Pro	Trp	Phe	Cys	Asp 315
Cys	Ser	Ile	Lys	Trp 320	Val	Thr	Glu	Trp	Leu 325	Lys	Tyr	Ile	Pro	Ser 330
Ser	Leu	Asn	Val	Arg 335	Gly	Phe	Met	Cys	Gln 340	Gly	Pro	Glu	Gln	Val 345
Arg	Gly	Met	Ala	Val 350	Arg	Glu	Leu	Asn	Met 355	Asn	Leu	Leu	Ser	Cys 360
Pro	Thr	Thr	Thr	Pro 365	Gly	Leu	Pro	Leu	Phe 370	Thr	Pro	Ala	Pro	Ser 375
Thr	Ala	Ser	Pro	Thr 380	Thr	Gln	Pro	Pro	Thr 385	Leu	Ser	Ile	Pro	Asn 390
Pro	Ser	Arg	Ser	Tyr 395	Thr	Pro	Pro	Thr	Pro 400	Thr	Thr	Ser	Lys	Leu 405
Pro	Thr	Ile	Pro	Asp 410	Trp	Asp	Gly	Arg	Glu 415	Arg	Val	Thr	Pro	Pro 420
Ile	Ser	Glu	Arg	Ile 425	Gln	Leu	Ser	Ile	His 430	Phe	Val	Asn	Asp	Thr 435
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Lys	Leu	Thr	Trp	Val 455	Lys	Met	Gly	His	Ser 460	Leu	Val	Gly	Gly	Ile 465
Val	Gln	Glu	Arg	Ile 470	Val	Ser	Gly	Glu	Lys 475	Gln	His	Leu	Ser	Leu 480
Val	Asn	Leu	Glu	Pro 485	Arg	Ser	Thr	Tyr	Arg 490	Ile	Cys	Leu	Val	Pro 495
Leu	Asp	Ala	Phe	Asn 500	Tyr	Arg	Ala	Val	Glu 505	Asp	Thr	Ile	Cys	Ser 510
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Phe	Leu	Leu	Ala	Gly	Leu	Ile	Gly	Gly	Ala	Val	Ile	Phe	Val	Leu
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Val	Val	Leu	Leu	Ser	Val	Phe	Cys	Trp	His	Met	His	Lys	Lys	Gly
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Arg	Tyr	Thr	Ser	Gln	Lys	Trp	Lys	Tyr	Asn	Arg	Gly	Arg	Arg	Lys
				575					580					585
Asp	Asp	Tyr	Cys	Glu	Ala	Gly	Thr	Lys	Lys	Asp	Asn	Ser	Ile	Leu
				590					595					600
Glu	Met	Thr	Glu	Thr	Ser	Phe	Gln	Ile	Val	Ser	Leu	Asn	Asn	Asp
				605					610					615
Gln	Leu	Leu	Lys	Gly	Asp	Phe	Arg	Leu	Gln	Pro	Ile	Tyr	Thr	Pro
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Asn	Gly	Gly	Ile	Asn	Tyr	Thr	Asp	Cys	His	Ile	Pro	Asn	Asn	Met
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<210> 117

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<400> 117

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<210> 118

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 118

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<210> 119

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<400> 119

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<211> 2857

<212> DNA

<213> Homo Sapien

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<211> 772

<212> PRT

<213> Homo Sapien

<400> 121

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				20					25					30
Val	Lys	Gln	Pro	Val	Arg	Ser	His	Leu	Arg	Val	Lys	Arg	Gly	Trp
				35					40					45
Val	Trp	Asn	Gln	Phe	Phe	Val	Pro	Glu	Glu	Met	Asn	Thr	Thr	Ser
				50					55					60
His	His	Ile	Gly	Gln	Leu	Arg	Ser	Asp	Leu	Asp	Asn	Gly	Asn	Asn
				65					70					75
Ser	Phe	Gln	Tyr	Lys	Leu	Leu	Gly	Ala	Gly	Ala	Gly	Ser	Thr	Phe
				80					85					90
Ile	Ile	Asp	Glu	Arg	Thr	Gly	Asp	Ile	Tyr	Ala	Ile	Gln	Lys	Leu
				95					100					105
Asp	Arg	Glu	Glu	Arg	Ser	Leu	Tyr	Ile	Leu	Arg	Ala	Gln	Val	Ile
				110					115					120
Asp	Ile	Ala	Thr	Gly	Arg	Ala	Val	Glu	Pro	Glu	Ser	Glu	Phe	Val
				125					130					135
Ile	Lys	Val	Ser	Asp	Ile	Asn	Asp	Asn	Glu	Pro	Lys	Phe	Leu	Asp
				140					145					150
Glu	Pro	Tyr	Glu	Ala	Ile	Val	Pro	Glu	Met	Ser	Pro	Glu	Gly	Thr
				155					160					165
Leu	Val	Ile	Gln	Val	Thr	Ala	Ser	Asp	Ala	Asp	Asp	Pro	Ser	Ser

170									175					180	
Gly	Asn	Asn	Ala	Arg 185	Leu	Leu	Tyr	Ser	Leu 190	Leu	Gln	Gly	Gln	Pro 195	
Tyr	Phe	Ser	Val	Glu 200	Pro	Thr	Thr	Gly	Val 205	Ile	Arg	Ile	Ser	Ser 210	
Lys	Met	Asp	Arg	Glu 215	Leu	Gln	Asp	Glu	Tyr 220	Trp	Val	Ile	Ile	Gln 225	
Ala	Lys	Asp	Met	Ile 230	Gly	Gln	Pro	Gly	Ala 235	Leu	Ser	Gly	Thr	Thr 240	
Ser	Val	Leu	Ile	Lys 245	Leu	Ser	Asp	Val	Asn 250	Asp	Asn	Lys	Pro	Ile 255	
Phe	Lys	Glu	Ser	Leu 260	Tyr	Arg	Leu	Thr	Val 265	Ser	Glu	Ser	Ala	Pro 270	
Thr	Gly	Thr	Ser	Ile 275	Gly	Thr	Ile	Met	Ala 280	Tyr	Asp	Asn	Asp	Ile 285	
Gly	Glu	Asn	Ala	Glu 290	Met	Asp	Tyr	Ser	Ile 295	Glu	Glu	Asp	Asp	Ser 300	
Gln	Thr	Phe	Asp	Ile 305	Ile	Thr	Asn	His	Glu 310	Thr	Gln	Glu	Gly	Ile 315	
Val	Ile	Leu	Lys	Lys 320	Lys	Val	Asp	Phe	Glu 325	His	Gln	Asn	His	Tyr 330	
Gly	Ile	Arg	Ala	Lys 335	Val	Lys	Asn	His	His 340	Val	Pro	Glu	Gln	Leu 345	
Met	Lys	Tyr	His	Thr 350	Glu	Ala	Ser	Thr	Thr 355	Phe	Ile	Lys	Ile	Gln 360	
Val	Glu	Asp	Val	Asp 365	Glu	Pro	Pro	Leu	Phe 370	Leu	Leu	Pro	Tyr	Tyr 375	
Val	Phe	Glu	Val	Phe 380	Glu	Glu	Thr	Pro	Gln 385	Gly	Ser	Phe	Val	Gly 390	
Val	Val	Ser	Ala	Thr 395	Asp	Pro	Asp	Asn	Arg 400	Lys	Ser	Pro	Ile	Arg 405	
Tyr	Ser	Ile	Thr	Arg 410	Ser	Lys	Val	Phe	Asn 415	Ile	Asn	Asp	Asn	Gly 420	
Thr	Ile	Thr	Thr	Ser 425	Asn	Ser	Leu	Asp	Arg 430	Glu	Ile	Ser	Ala	Trp 435	
Tyr	Asn	Leu	Ser	Ile 440	Thr	Ala	Thr	Glu	Lys 445	Tyr	Asn	Ile	Glu	Gln 450	
Ile	Ser	Ser	Ile	Pro 455	Leu	Tyr	Val	Gln	Val 460	Leu	Asn	Ile	Asn	Asp 465	



His	Ala	Pro	Glu	Phe	Ser	Gln	Tyr	Tyr	Glu	Thr	Tyr	Val	Cys	Glu
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Asn	Ala	Gly	Ser	Gly	Gln	Val	Ile	Gln	Thr	Ile	Ser	Ala	Val	Asp
				485					490					495
Arg	Asp	Glu	Ser	Ile	Glu	Glu	His	His	Phe	Tyr	Phe	Asn	Leu	Ser
				500					505					510
Val	Glu	Asp	Thr	Asn	Asn	Ser	Ser	Phe	Thr	Ile	Ile	Asp	Asn	Gln
				515					520					525
Asp	Asn	Thr	Ala	Val	Ile	Leu	Thr	Asn	Arg	Thr	Gly	Phe	Asn	Leu
				530					535					540
Gln	Glu	Glu	Pro	Val	Phe	Tyr	Ile	Ser	Ile	Leu	Ile	Ala	Asp	Asn
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Gly	Ile	Pro	Ser	Leu	Thr	Ser	Thr	Asn	Thr	Leu	Thr	Ile	His	Val
				560					565					570
Cys	Asp	Cys	Gly	Asp	Ser	Gly	Ser	Thr	Gln	Thr	Cys	Gln	Tyr	Gln
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Glu	Leu	Val	Leu	Ser	Met	Gly	Phe	Lys	Thr	Glu	Val	Ile	Ile	Ala
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Ile	Leu	Ile	Cys	Ile	Met	Ile	Ile	Phe	Gly	Phe	Ile	Phe	Leu	Thr
				605					610					615
Leu	Gly	Leu	Lys	Gln	Arg	Arg	Lys	Gln	Ile	Leu	Phe	Pro	Glu	Lys
				620					625					630
Ser	Glu	Asp	Phe	Arg	Glu	Asn	Ile	Phe	Gln	Tyr	Asp	Asp	Glu	Gly
				635					640					645
Gly	Gly	Glu	Glu	Asp	Thr	Glu	Ala	Phe	Asp	Ile	Ala	Glu	Leu	Arg
				650					655					660
Ser	Ser	Thr	Ile	Met	Arg	Glu	Arg	Lys	Thr	Arg	Lys	Thr	Thr	Ser
				665					670					675
Ala	Glu	Ile	Arg	Ser	Leu	Tyr	Arg	Gln	Ser	Leu	Gln	Val	Gly	Pro
				680					685					690
Asp	Ser	Ala	Ile	Phe	Arg	Lys	Phe	Ile	Leu	Glu	Lys	Leu	Glu	Glu
				695					700					705
Ala	Asn	Thr	Asp	Pro	Cys	Ala	Pro	Pro	Phe	Asp	Ser	Leu	Gln	Thr
				710					715					720
Tyr	Ala	Phe	Glu	Gly	Thr	Gly	Ser	Leu	Ala	Gly	Ser	Leu	Ser	Ser
				725					730					735
Leu	Glu	Ser	Ala	Val	Ser	Asp	Gln	Asp	Glu	Ser	Tyr	Asp	Tyr	Leu
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Asn	Glu	Leu	Gly	Pro	Arg	Phe	Lys	Arg	Leu	Ala	Cys	Met	Phe	Gly



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<212> PRT  
<213> Homo Sapien

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Gly Ala Ala Ala Pro Ile Ser Ser His Cys Arg Leu Asp Lys Ser  
35 40 45  
Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala  
50 55 60  
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<211> 529
<212> PRT
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Lys	Pro	Gly	Asp	Gln	Ile	Leu	Asp	Trp	Gln	Tyr	Gly	Val	Thr	Gln	
				35					40					45	
Ala	Phe	Pro	His	Thr	Glu	Glu	Glu	Val	Glu	Val	Asp	Ser	His	Ala	
				50					55					60	
Tyr	Ser	His	Arg	Trp	Lys	Arg	Asn	Leu	Asp	Phe	Leu	Lys	Ala	Val	
				65					70					75	
Asp	Thr	Asn	Arg	Ala	Ser	Val	Gly	Gln	Asp	Ser	Pro	Glu	Pro	Arg	
				80					85					90	
Ser	Phe	Thr	Asp	Leu	Leu	Leu	Asp	Asp	Gly	Gln	Asp	Asn	Asn	Thr	
				95					100					105	
Gln	Ile	Glu	Glu	Asp	Thr	Asp	His	Asn	Tyr	Tyr	Ile	Ser	Arg	Ile	
				110					115					120	
Tyr	Gly	Pro	Ser	Asp	Ser	Ala	Ser	Arg	Asp	Leu	Trp	Val	Asn	Ile	
				125					130					135	
Asp	Gln	Met	Glu	Lys	Asp	Lys	Val	Lys	Ile	His	Gly	Ile	Leu	Ser	
				140					145					150	
Asn	Thr	His	Arg	Gln	Ala	Ala	Arg	Val	Asn	Leu	Ser	Phe	Asp	Phe	
				155					160					165	
Pro	Phe	Tyr	Gly	His	Phe	Leu	Arg	Glu	Ile	Thr	Val	Ala	Thr	Gly	
				170					175					180	
Gly	Phe	Ile	Tyr	Thr	Gly	Glu	Val	Val	His	Arg	Met	Leu	Thr	Ala	
				185					190					195	

Thr Gln Tyr Ile Ala Pro Leu Met Ala Asn Phe Asp Pro Ser Val  
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 Ser Arg Asn Ser Thr Val Arg Tyr Phe Asp Asn Gly Thr Ala Leu  
 215 220 225  
 Val Val Gln Trp Asp His Val His Leu Gln Asp Asn Tyr Asn Leu  
 230 235 240  
 Gly Ser Phe Thr Phe Gln Ala Thr Leu Leu Met Asp Gly Arg Ile  
 245 250 255  
 Ile Phe Gly Tyr Lys Glu Ile Pro Val Leu Val Thr Gln Ile Ser  
 260 265 270  
 Ser Thr Asn His Pro Val Lys Val Gly Leu Ser Asp Ala Phe Val  
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 Val Val His Arg Ile Gln Gln Ile Pro Asn Val Arg Arg Arg Thr  
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 Asn Ile Ser Ala Val Glu Met Thr Pro Leu Pro Thr Cys Leu Gln  
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 Arg His Arg Gln Asp Trp Val Asp Ser Gly Cys Pro Glu Glu Ser  
 365 370 375  
 Lys Glu Lys Met Cys Glu Asn Thr Glu Pro Val Glu Thr Ser Ser  
 380 385 390  
 Arg Thr Thr Thr Thr Val Gly Ala Thr Thr Thr Gln Phe Arg Val  
 395 400 405  
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 410 415 420  
 Leu Pro Thr Glu Asp Asp Thr Lys Ile Ala Leu His Leu Lys Asp  
 425 430 435  
 Asn Gly Ala Ser Thr Asp Asp Ser Ala Ala Glu Lys Lys Gly Gly  
 440 445 450  
 Thr Leu His Ala Gly Leu Ile Ile Gly Ile Leu Ile Leu Val Leu  
 455 460 465  
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<210> 129  
 <211> 4834  
 <212> DNA  
 <213> Homo Sapien

<220>  
 <221> unsure  
 <222> 3784  
 <223> unknown base

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<210> 130

<211> 354

<212> PRT

<213> Homo Sapien

<400> 130

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Trp	Leu	Ala	Ala	Val	Leu	Leu	Ser	Leu	Cys	Cys	Leu	Leu	Pro	Ser
				20					25					30
Cys	Leu	Pro	Ala	Gly	Gln	Ser	Val	Asp	Phe	Pro	Trp	Ala	Ala	Val
				35					40					45
Asp	Asn	Met	Met	Val	Arg	Lys	Gly	Asp	Thr	Ala	Val	Leu	Arg	Cys

					50					55					60
Tyr	Leu	Glu	Asp	Gly	Ala	Ser	Lys	Gly	Ala	Trp	Leu	Asn	Arg	Ser	
				65					70					75	
Ser	Ile	Ile	Phe	Ala	Gly	Gly	Asp	Lys	Trp	Ser	Val	Asp	Pro	Arg	
				80					85					90	
Val	Ser	Ile	Ser	Thr	Leu	Asn	Lys	Arg	Asp	Tyr	Ser	Leu	Gln	Ile	
				95					100					105	
Gln	Asn	Val	Asp	Val	Thr	Asp	Asp	Gly	Pro	Tyr	Thr	Cys	Ser	Val	
				110					115					120	
Gln	Thr	Gln	His	Thr	Pro	Arg	Thr	Met	Gln	Val	His	Leu	Thr	Val	
				125					130					135	
Gln	Val	Pro	Pro	Lys	Ile	Tyr	Asp	Ile	Ser	Asn	Asp	Met	Thr	Val	
				140					145					150	
Asn	Glu	Gly	Thr	Asn	Val	Thr	Leu	Thr	Cys	Leu	Ala	Thr	Gly	Lys	
				155					160					165	
Pro	Glu	Pro	Ser	Ile	Ser	Trp	Arg	His	Ile	Ser	Pro	Ser	Ala	Lys	
				170					175					180	
Pro	Phe	Glu	Asn	Gly	Gln	Tyr	Leu	Asp	Ile	Tyr	Gly	Ile	Thr	Arg	
				185					190					195	
Asp	Gln	Ala	Gly	Glu	Tyr	Glu	Cys	Ser	Ala	Glu	Asn	Asp	Val	Ser	
				200					205					210	
Phe	Pro	Asp	Val	Arg	Lys	Val	Lys	Val	Val	Val	Asn	Phe	Ala	Pro	
				215					220					225	
Thr	Ile	Gln	Glu	Ile	Lys	Ser	Gly	Thr	Val	Thr	Pro	Gly	Arg	Ser	
				230					235					240	
Gly	Leu	Ile	Arg	Cys	Glu	Gly	Ala	Gly	Val	Pro	Pro	Pro	Ala	Phe	
				245					250					255	
Glu	Trp	Tyr	Lys	Gly	Glu	Lys	Lys	Leu	Phe	Asn	Gly	Gln	Gln	Gly	
				260					265					270	
Ile	Ile	Ile	Gln	Asn	Phe	Ser	Thr	Arg	Ser	Ile	Leu	Thr	Val	Thr	
				275					280					285	
Asn	Val	Thr	Gln	Glu	His	Phe	Gly	Asn	Tyr	Thr	Cys	Val	Ala	Ala	
				290					295					300	
Asn	Lys	Leu	Gly	Thr	Thr	Asn	Ala	Ser	Leu	Pro	Leu	Asn	Pro	Pro	
				305					310					315	
Ser	Thr	Ala	Gln	Tyr	Gly	Ile	Thr	Gly	Ser	Ala	Asp	Val	Leu	Phe	
				320					325					330	
Ser	Cys	Trp	Tyr	Leu	Val	Leu	Thr	Leu	Ser	Ser	Phe	Thr	Ser	Ile	
				335					340					345	

Phe Tyr Leu Lys Asn Ala Ile Leu Gln  
350

<210> 131  
<211> 823  
<212> DNA  
<213> Homo Sapien

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attatgttaa atcacttggt ttgtttctca cggtctcctg cctgctatag 150  
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cgagcatatg caggaagcgg caggaataag gaaaagcagc ctctgactt 650  
tctcgtcttg gtggtttgag tggacctccc aggccagtgc cgggcccctc 700  
ataggagagg aagctcggga ggtggccagg cggcaggaag gcgcaccccc 750  
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agaccttctc ctctgcaaaa tag 823

<210> 132  
<211> 155  
<212> PRT  
<213> Homo Sapien

<400> 132  
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Pro Ser Ser Lys Glu Glu Thr Gln Val Pro Lys Thr Leu Ile Ser  
20 25 30  
Gly Leu Pro Gly Arg Lys Ser Ser Ser Arg Val Gly Glu Lys Leu  
35 40 45

Gln Ser Ala His Lys Met Pro Leu Ser Pro Gly Leu Leu Leu Leu  
50 55 60  
Leu Leu Ser Gly Ala Thr Ala Thr Ala Ala Leu Pro Leu Glu Gly  
65 70 75  
Gly Pro Thr Gly Arg Asp Ser Glu His Met Gln Glu Ala Ala Gly  
80 85 90  
Ile Arg Lys Ser Ser Leu Leu Thr Phe Leu Ala Trp Trp Phe Glu  
95 100 105  
Trp Thr Ser Gln Ala Ser Ala Gly Pro Leu Ile Gly Glu Glu Ala  
110 115 120  
Arg Glu Val Ala Arg Arg Gln Glu Gly Ala Pro Pro Gln Gln Ser  
125 130 135  
Ala Arg Arg Asp Arg Met Pro Cys Arg Asn Phe Phe Trp Lys Thr  
140 145 150  
Phe Ser Ser Cys Lys  
155

<210> 133  
<211> 24  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 133  
tcagggtgc caggaaggaa gagc 24

<210> 134  
<211> 28  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

<400> 134  
gcaggaggag aaggtcttcc agaagaag 28

<210> 135  
<211> 45  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Synthetic oligonucleotide probe

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<210> 136

<211> 1875  
<212> DNA  
<213> Homo Sapien

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aagatcatgt ttaattgtg agaaacaggg ccgagcacag tggtcacgc 1350

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aatacaaaaa	ttagctaggc	atgatggcgc	atgcctataa	tcccagctac	1500
tcgagtgcct	gaggcaggag	aattgcatga	acccgggagg	aggaggagga	1550
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<210> 137

<211> 325

<212> PRT

<213> Homo Sapien

<400> 137

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Ser	Ala	Leu	Gly	Met	Val	Pro	Pro	Pro	Glu	Asn	Val	Arg	Met	Asn
				20					25					30
Ser	Val	Asn	Phe	Lys	Asn	Ile	Leu	Gln	Trp	Glu	Ser	Pro	Ala	Phe
				35					40					45
Ala	Lys	Gly	Asn	Leu	Thr	Phe	Thr	Ala	Gln	Tyr	Leu	Ser	Tyr	Arg
				50					55					60
Ile	Phe	Gln	Asp	Lys	Cys	Met	Asn	Thr	Thr	Leu	Thr	Glu	Cys	Asp
				65					70					75
Phe	Ser	Ser	Leu	Ser	Lys	Tyr	Gly	Asp	His	Thr	Leu	Arg	Val	Arg
				80					85					90
Ala	Glu	Phe	Ala	Asp	Glu	His	Ser	Asp	Trp	Val	Asn	Ile	Thr	Phe
				95					100					105
Cys	Pro	Val	Asp	Asp	Thr	Ile	Ile	Gly	Pro	Pro	Gly	Met	Gln	Val
				110					115					120
Glu	Val	Leu	Ala	Asp	Ser	Leu	His	Met	Arg	Phe	Leu	Ala	Pro	Lys
				125					130					135
Ile	Glu	Asn	Glu	Tyr	Glu	Thr	Trp	Thr	Met	Lys	Asn	Val	Tyr	Asn
				140					145					150



Ser	Trp	Thr	Tyr	Asn	Val	Gln	Tyr	Trp	Lys	Asn	Gly	Thr	Asp	Glu
				155					160					165
Lys	Phe	Gln	Ile	Thr	Pro	Gln	Tyr	Asp	Phe	Glu	Val	Leu	Arg	Asn
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Leu	Glu	Pro	Trp	Thr	Thr	Tyr	Cys	Val	Gln	Val	Arg	Gly	Phe	Leu
				185					190					195
Pro	Asp	Arg	Asn	Lys	Ala	Gly	Glu	Trp	Ser	Glu	Pro	Val	Cys	Glu
				200					205					210
Gln	Thr	Thr	His	Asp	Glu	Thr	Val	Pro	Ser	Trp	Met	Val	Ala	Val
				215					220					225
Ile	Leu	Met	Ala	Ser	Val	Phe	Met	Val	Cys	Leu	Ala	Leu	Leu	Gly
				230					235					240
Cys	Phe	Ser	Leu	Leu	Trp	Cys	Val	Tyr	Lys	Lys	Thr	Lys	Tyr	Ala
				245					250					255
Phe	Ser	Pro	Arg	Asn	Ser	Leu	Pro	Gln	His	Leu	Lys	Glu	Phe	Leu
				260					265					270
Gly	His	Pro	His	His	Asn	Thr	Leu	Leu	Phe	Phe	Ser	Phe	Pro	Leu
				275					280					285
Ser	Asp	Glu	Asn	Asp	Val	Phe	Asp	Lys	Leu	Ser	Val	Ile	Ala	Glu
				290					295					300
Asp	Ser	Glu	Ser	Gly	Lys	Gln	Asn	Pro	Gly	Asp	Ser	Cys	Ser	Leu
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Gly	Thr	Pro	Pro	Gly	Gln	Gly	Pro	Gln	Ser					
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 <212> DNA  
 <213> Homo Sapien

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 gccgccgccc ctgctggcgg agatgccccg ccggggcaaaa tcgcggtggg 150  
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 ttggacctcg ggtgcagatc gacgtgtacg agaagggaac cgtgggtggc 250  
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 ctcttccac tccctgagcc tgcacatgca ggacttcgtc aagctgctgg 350  
 ggctgaggca ccggcgcgag gtgggtgggca ggagcgccat ctteggcggg 400

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<211> 494

<212> PRT

<213> Homo Sapien

<400> 139

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				20					25					30
Val	Val	Gly	Ala	Gly	Ile	Gly	Gly	Ser	Ala	Val	Ala	His	Phe	Leu
				35					40					45
Gln	Gln	His	Phe	Gly	Pro	Arg	Val	Gln	Ile	Asp	Val	Tyr	Glu	Lys
				50					55					60
Gly	Thr	Val	Gly	Gly	Arg	Leu	Ala	Thr	Ile	Ser	Val	Asn	Lys	Gln
				65					70					75
His	Tyr	Glu	Ser	Gly	Ala	Ala	Ser	Phe	His	Ser	Leu	Ser	Leu	His
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Met	Gln	Asp	Phe	Val	Lys	Leu	Leu	Gly	Leu	Arg	His	Arg	Arg	Glu
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Val	Val	Gly	Arg	Ser	Ala	Ile	Phe	Gly	Gly	Glu	His	Phe	Met	Leu

Glu Glu Thr Asp	Trp Tyr Leu Leu Asn	Leu Phe Arg Leu Trp	Trp
125		130	135
His Tyr Gly Ile	Ser Phe Leu Arg Leu	Gln Met Trp Val Glu	Glu
140		145	150
Val Met Glu Lys	Phe Met Arg Ile Tyr	Lys Tyr Gln Ala His	Gly
155		160	165
Tyr Ala Phe Ser	Gly Val Glu Glu Leu	Leu Tyr Ser Leu Gly	Glu
170		175	180
Ser Thr Phe Val	Asn Met Thr Gln His	Ser Val Ala Glu Ser	Leu
185		190	195
Leu Gln Val Gly	Val Thr Gln Arg Phe	Ile Asp Asp Val Val	Ser
200		205	210
Ala Val Leu Arg	Ala Ser Tyr Gly Gln	Ser Ala Ala Met Pro	Ala
215		220	225
Phe Ala Gly Ala	Met Ser Leu Ala Gly	Ala Gln Gly Ser Leu	Trp
230		235	240
Ser Val Glu Gly	Gly Asn Lys Leu Val	Cys Ser Gly Leu Leu	Lys
245		250	255
Leu Thr Lys Ala	Asn Val Ile His Ala	Thr Val Thr Ser Val	Thr
260		265	270
Leu His Ser Thr	Glu Gly Lys Ala Leu	Tyr Gln Val Ala Tyr	Glu
275		280	285
Asn Glu Val Gly	Asn Ser Ser Asp Phe	Tyr Asp Ile Val Val	Ile
290		295	300
Ala Thr Pro Leu	His Leu Asp Asn Ser	Ser Ser Asn Leu Thr	Phe
305		310	315
Ala Gly Phe His	Pro Pro Ile Asp Asp	Val Gln Gly Ser Phe	Gln
320		325	330
Pro Thr Val Val	Ser Leu Val His Gly	Tyr Leu Asn Ser Ser	Tyr
335		340	345
Phe Gly Phe Pro	Asp Pro Lys Leu Phe	Pro Phe Ala Asn Ile	Leu
350		355	360
Thr Thr Asp Phe	Pro Ser Phe Phe Cys	Thr Leu Asp Asn Ile	Cys
365		370	375
Pro Val Asn Ile	Ser Ala Ser Phe Arg	Arg Lys Gln Pro Gln	Glu
380		385	390
Ala Ala Val Trp	Arg Val Gln Ser Pro	Lys Pro Leu Phe Arg	Thr
395		400	405

Gln Leu Lys Thr Leu Phe Arg Ser Tyr Tyr Ser Val Gln Thr Ala  
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 Glu Trp Gln Ala His Pro Leu Tyr Gly Ser Arg Pro Thr Leu Pro  
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 Arg Phe Ala Leu His Asp Gln Leu Phe Tyr Leu Asn Ala Leu Glu  
 440 445 450  
 Trp Ala Ala Ser Ser Val Glu Val Met Ala Val Ala Ala Lys Asn  
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